communication becomes possible between the mobile node 10 in the foreign network 21 and the correspondent node 11 on the IP network.

The global addresses which are assigned to the router 12, HA 16, and NAT 18 in FIG. 6 has been described above as a single address C. However, different global addresses may be assigned, respectively. Similarly, different global addresses may be assigned to the router 13, the FA 17, and the NAT 19, respectively.

A method such as for example the above is stored on computer readable medium such as HARD DISK, FLOPPY DISK, CDROM, DVDROM, MEMORY.

## What is claimed is:

- 1. A method for packet communication wherein a sender address of a packet including a private address as a sender address sent by a node which can be moved among different networks is changed to a same global address even when said node sends said packet in either of the networks.
- 2. A method for packet communication wherein a node including a private address as a sender address is moved from a first network having said node and address changing means for receiving the packet from said node and then changing said sender address of the packet to a global

address for output into a second network which is different from said first network, comprising the steps of:

receiving said packet from said node which is moved into said second network;

changing said sender address of said received packet from said private address to a same global address as said global address; and

sending said packet whose sender address has been changed to the outside of said second network.

- 3. A method for packet communication according to claim 2, comprising the steps of said node moved into said second network and said address changing means in said first network notifying to each other correspondence between said private address and said global address periodically after said node is registered in a home agent for managing said first network and a foreign agent for managing said second network.
- 4. A method for packet communication according to claim 2, comprising the steps of:

detecting that a registration request is sent from said node moved into said second network to a foreign agent for managing said second network; and

after the detection, requesting said address changing means in said first network said global address mapped to

said private address.

5. A method for packet communication according to claim 2, comprising the steps of:

detecting that a response indicating that said node is registered is sent from a home agent for managing said first network to a foreign agent for managing said second network; and

after the detection, requesting said address changing means in said first network said global address mapped to said private address.

- 6. A method for packet communication according to claim 2, further comprising the step of adding code for requesting said global address mapped to said private address to a registration request sent from a foreign agent for managing said second network to a home agent for managing said first network.
- 7. A method for packet communication, comprising the steps of;

outputting a packet including a private address as a sender address to changing means for changing a seder address of said packet from said private address to a global address; and

sending a packet whose sending address is a global address which is same as said global address in a second

network which is different from said first network.

- 8. A method for packet communication, comprising the steps of:
- , receiving a packet including a private address as a sender address from a first node in a first network;

changing a sender address of said received packet from said private address to a first global address;

sending said packet whose sender address has been changed to the outside to said first network;

receives a packet including a second global address, which is different from said first global address as a sender address, from a second node which has been moved into said first network from said second network which is different from said first network; and

sending said packet to the out side of said first network without changing a sender address of said packet received from said second node from said second global address to said first global address.

9. A computer program stored on a computer readable medium, wherein a node including a private address as a sender address is moved from a first network having said node and address changing means for receiving the packet from said node and then changing said sender address of the packet to a global address for output into a second network which is different from said first network,

## comprising:

code that receives said packet from said node which is moved into said second network;

code that changes said sender address of said received packet from said private address to a same global address as said global address; and

code that sends said packet whose sender address has been changed to the outside of said second network.